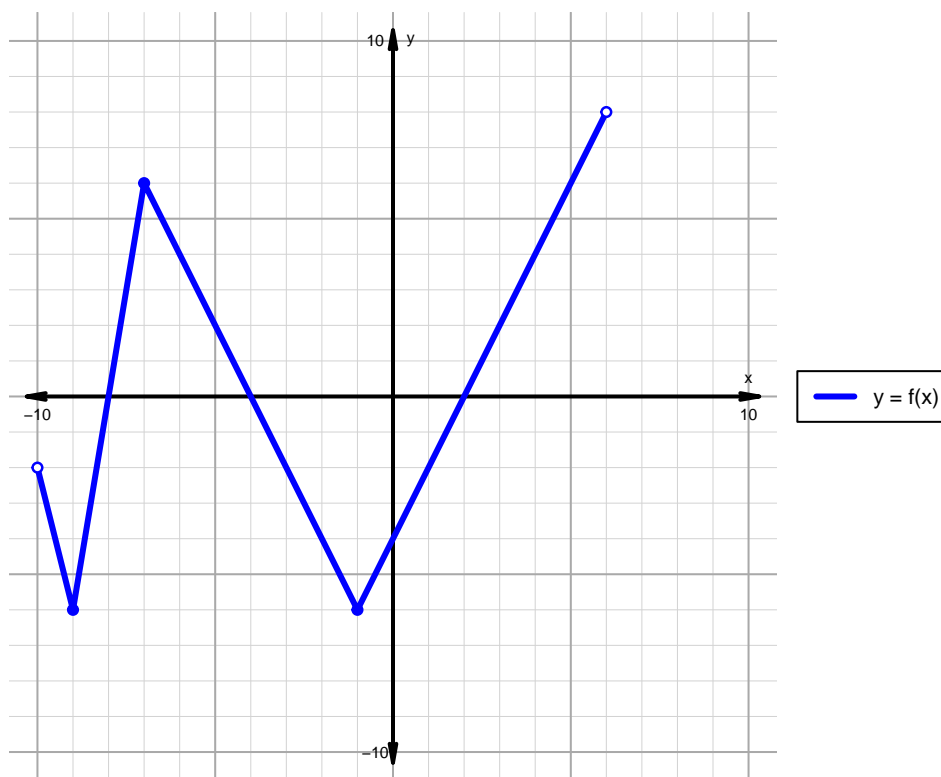


Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Intervals, Transformations, and Slope Practice (version 33)**

1. The function  $f$  is graphed below.

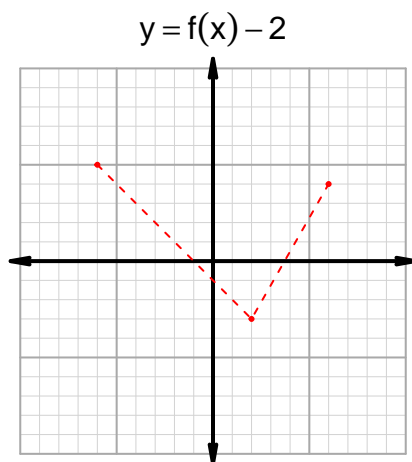
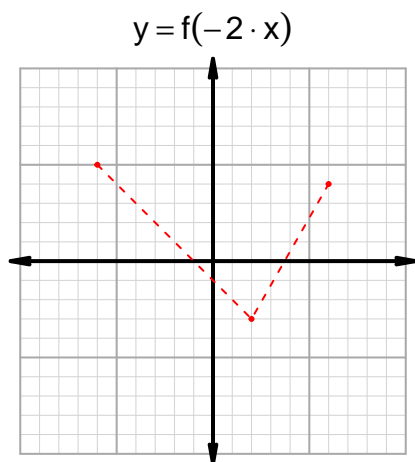
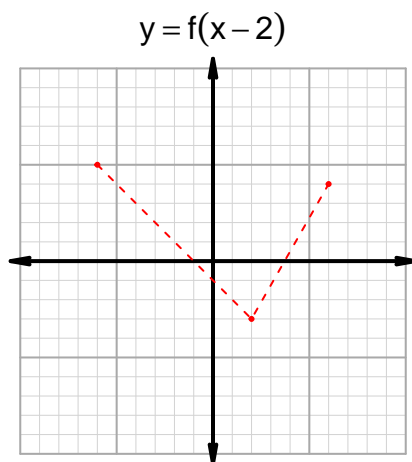
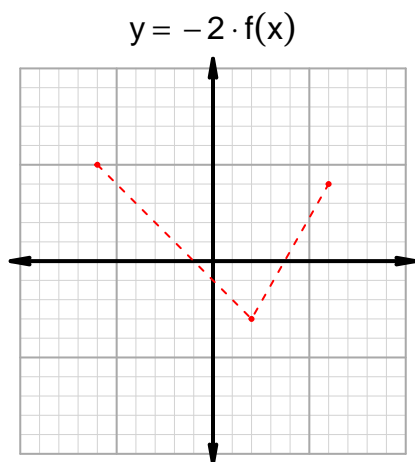


Indicate the following intervals using interval notation. Remember, you can use  $\cup$  between two intervals to indicate the union. Except for range, all intervals will indicate  $x$  values; this is standard.

Feature	Where
Positive	
Negative	
Increasing	
Decreasing	
Domain	
Range	

## Intervals, Transformations, and Slope Practice (version 33)

2. In the four graphs below,  $y = f(x)$  is graphed as a dotted line. Please add the indicated transformed graphs indicated by the equations below using a solid line.



3. Let function  $g$  be defined by the table below. Use the formula  $\frac{g(x_2) - g(x_1)}{x_2 - x_1}$  to find the average rate of change between  $x_1 = 22$  and  $x_2 = 49$ . Express your answer as a reduced fraction.

$x$	$g(x)$
22	40
40	49
49	85
85	22